

## INTERNATIONAL SEARCH REPORT

 Application No  
 PCT/EP 03/07993

| <b>A. CLASSIFICATION OF SUBJECT MATTER</b><br>IPC 7 H01J37/32  |  |  |
|--|--|--|
| According to International Patent Classification (IPC) or to both national classification and IPC  |  |  |
| <b>B. FIELDS SEARCHED</b><br>Minimum documentation searched (classification system followed by classification symbols)<br>IPC 7 H01J C23C  |  |  |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  |  |  |
| Electronic data base consulted during the international search (name of data base and, where practical, search terms used)<br>EPO-Internal, WPI Data, PAJ  |  |  |
| <b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>  |  |  |
| Category *   | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No.  |
| X  | WO 98/19965 A (KALYANARAMAN RAJA ;<br>MATERIALS MODIFICATION INC (US); SETHURAM<br>KRUPASHA) 14 May 1998 (1998-05-14)<br>page 5, line 14 - page 8, line 30; figures<br>-----   | 1,4-6,<br>10-12,14   |
| X  | US 6 357 386 B1 (KELLER SILVANO)<br>19 March 2002 (2002-03-19)<br>column 2, line 47 - line 59; figures<br>-----  | 1,2,10   |
| X  | PATENT ABSTRACTS OF JAPAN<br>vol. 0122, no. 07 (E-621),<br>14 June 1988 (1988-06-14)<br>& JP 63 004615 A (HITACHI TOKYO ELECTRON<br>CO LTD; others: 01),<br>9 January 1988 (1988-01-09)<br>abstract<br>-----<br>-/-- | 1,10   |
| <div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> Further documents are listed in the continuation of box C.         </div> <div> <input checked="" type="checkbox"/> Patent family members are listed in annex.         </div> </div>  |  |  |
| <div style="display: flex;"> <div style="flex: 1;"> <p>* Special categories of cited documents :</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="flex: 1;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"&amp;" document member of the same patent family</p> </div> </div> |  |  |
| Date of the actual completion of the international search<br><br>25 February 2004  |  | Date of mailing of the international search report<br><br>02/03/2004 |
| Name and mailing address of the ISA<br>European Patent Office, P.B. 5818 Patentlaan 2<br>NL - 2280 HV Rijswijk<br>Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,<br>Fax: (+31-70) 340-3016   |  | Authorized officer<br><br>Schaub, G                                  |

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages                 | Relevant to claim No. |
|------------|--|-----------------------|
| A          | EP 0 768 702 A (APPLIED MATERIALS INC)<br>16 April 1997 (1997-04-16)<br>abstract; figures<br>----- | 1, 10                 |

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Application No

PCT/EP 03/07993

| Patent document<br>cited in search report |    | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
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| WO 9819965                                | A  | 14-05-1998          | EP 0946414 A1              | 06-10-1999          |
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|   |    |                     | WO 9819965 A1              | 14-05-1998          |
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